

Lafarge Building Materials Inc.

SPDES # NY 000 5037

Response to USEPA comments:

Comment #1:

Biological Monitoring Plan

Technological Installation and Operation Plan. The Technological Installation and Operation Plan in the Biological Monitoring Requirements section of the draft Lafarge permit requires the permittee to include “a schedule to implement the operational measures in Requirement 1(d) and (e)” in the Technology Installation and Operation Plan. However, there is no section 1(d) or 1(e) in the Biological Monitoring Plan. Please clarify what section this requirement refers to.

Hudson River Intake. The draft Lafarge permit specifies that, by July 1, 2016, no more than 2MGD of Hudson River water may be used for cooling purposes. The Verification Monitoring Program requires that the permittee submit an *Annual Water Use Summary report* which contains the monthly totals of Hudson River water used during the previous year. Monthly data is inadequate for ensuring that Lafarge takes no more than 2MGD. In order to ensure compliance with the permit, daily total and a specified continuous daily flow measurement are necessary. Please ensure that the Lafarge permit establishes an additional monitoring point with daily continuous flow monitoring for the Hudson River intake water.

Response:

Biological Monitoring Requirement No. 1 has been lettered for clarification.

The Department will require daily flow monitoring and requesting a monthly summary of this data to be incorporated into the Annual Water Use Summary report.

Comment #2:

Description of Monitoring Locations

The diagram of the treatment process on page 23 of the draft Lafarge permit is blurry and illegible. The map on page 24 of the draft Lafarge permit is too dark to be useful for identifying the additional outfalls. Please provide a diagram for the plant after modernization that clearly identifies the monitoring locations for all outfalls in the Lafarge permit and a legible map of the additional outfall locations.

Response:

Pages 23 and 24 are revised with best available diagrams.

Comment#3:**Outfall 25A – Non-contact Cooling Water Dissolved Solids**

As previously noted, NYSWQS state that, for dischargers to class C waters, the total dissolved solids shall not exceed 500 mg/l. The existing effluent quality for total dissolved solids, as stated in the fact sheet, for Outfall 25A is 1400 mg/l. Footnote 1 of page 17 of the fact sheet states that the high total dissolved solids concentration is “attributed to recycled cooling water while sampling” and is not expected. If sampling has only been done during a time that is not representative of normal operations of effluent quality, NYSDEC should establish additional short-term monitoring to collect sufficient data to conduct a reasonable potential analysis. Based on the outcome of the reasonable potential analysis, the permits must establish control measures for total dissolved solids (e.g., effluent limit, no-net addition limit, etc.)

Response:

As noted on page 10 of the permit, Outfall 25A is terminated in June 2016 or when plant modernization is complete, whichever is earlier.

The short term monitoring for TDS is not required as the 95th percentile concentration of TDS in the source of Non Contact Cooling Water (i.e. Hudson River) is 164 mg/l, based on 2008-2013 RIBS data for Lower Hudson River in Bethlehem station # 13010139.

Comment# 4

Footnotes.

The draft Lafarge permit contains the following unclear or incorrect footnotes:

A footnote for Outfall 003 must require EPA Method 1631 for mercury sampling. Outfall 003 refers to footnote 4 for Whole Effluent Toxicity (WET) testing. However, the permit does not contain a footnote 4.

Response:

The footnote for Mercury, Total has been updated as requested.

The WET testing for Outfall 003 has been deleted as the CKD leachate is no longer discharged through this outfall.

Comment# 5:**Outfalls 006 and 007 – Stormwater Dissolved Solids.**

New York State’s Water Quality Standards (NYSWQS) at 6 NYCRR Part 703.3 state that, for discharges to class C waters, the total dissolved solids “shall be kept as low as practicable to maintain the best usage of the waters but in no case shall it exceed 500 mg/l”. As provided by the fact sheet, the existing effluent quality for total dissolved solids is 1220 mg/l and 2940 mg/l at Outfalls 006 and 007, respectively. The total dissolved solids in the discharges from Outfalls 006

and 007 clearly have the reasonable potential to cause, or contribute to an excursion above the water quality standard for total dissolved solids – especially considering Outfall 007 discharges to water classified for trout spawning.

The high concentration of total dissolved solids in the stormwater effluent indicates that the Best Management Practices (BMPs) and Stormwater Pollution Prevention Plan (SWPPP) at the facility are insufficient to mitigate potential pollutant releases and protect water quality. NYSDEC must establish additional measures in the Lafarge permit to address the high concentration of total dissolved solids in the stormwater outfalls.

Response:

Outfalls 006 and 007 are storm water outfalls. During the storm events (wet weather events), the flow of the Coeymans creek significantly increases and may provide sufficient dilution to meet the applicable Water Quality Standard.

The permit will include short term monitoring program for Flow and TDS for Coeymans Creek from April 2015 to October 2015 to ascertain compliance with the applicable Water Quality Standard.

Comment # 6:

Outfall 007 – Monitoring Frequency.

The draft Lafarge permit establishes quarterly sampling for a variety of parameters at Outfall 007. During a site inspection in November 2011, EPA and NYSDEC visually observed cement kiln dust landfill seeps to Outfall 007. As cement kiln dust seeps may impact water quality and Outfall 007 discharges to a segment of Coeyman's Creek classified as trout waters, increased monitoring frequency is vital to ensuring that water quality and the best usages of the receiving water are protected. Please ensure that monthly monitoring at Outfall 007 is established in the permit.

Response:

The monitoring frequency for all parameters has been changed to Monthly as requested.

Comment # 7

Outfall 021 - Effective Date. Page 9 of the draft Lafarge permit indicates that the discharge authorization and monitoring for Outfall 021 is "effective from the date the plant modernization begins". Please establish language in the draft permit that more clearly describes the effective date (e.g. "effective from the date of groundbreaking on the plant modernization construction").

Response:

Effective date for all three outfalls (021,024,025) is same. The revised permit will indicate that the discharge authorization and monitoring requirement begin when the plan modernization is complete or in July 2016.

Comment # 8**Outfall 23A – Pathogen Criteria.**

Outfall 23A is an internal outfall at the Lafarge facility which eventually discharges into a segment of the Hudson River classified as a class C waterbody. NYSWQS at 6 NYCRR Part 701.8 specify that the best usage for class C waters is fishing and the waters shall be suitable for fish, shellfish, and wildlife propagation and survival and primary and secondary contact recreation.

The draft Lafarge permit establishes an effluent limitation for fecal coliforms for Outfall 23A but does not establish limits for total coliforms. The NYSWQS at 6 NYCRR Part 703.4 establishes water-quality criteria for fecal coliforms and total coliforms for facilities discharging to class C waters. As stated in the NYSWQS (6 NYCRR Part 701.1), the discharge of sewage, industrial waste, or other wastes shall not cause impairment of the best usages of the receiving water.

The Division of Water's Technical and Operational Guidance Series (TOGS) 1.3.3 – SPDES Permit Development for POTWs does not provide guidance for establishing an effluent limitation for total coliforms. However, the title page of TOGS 1.3.3 states that the document provides guidance to NYSDEC staff on how to ensure compliance with statutory and regulatory requirements and that nothing prevents staff from varying from the guidance as the specific facts and circumstances may dictate provided staff actions comply with applicable statutory and regulatory requirements. Additionally, the title page states that the guidance document is not a rule under the State Administrative Procedure Act section 102(2)(a)(i) and that the guidance does not create any enforceable rights for the benefit of any party. The NYSWQS clearly establish water quality standards for fecal and total coliforms.

In order to comply with the NYSWQS and ensure that the best usages of the receiving water are not impaired, please conduct a reasonable potential analysis for total coliforms and, if necessary, establish total coliforms effluent limitations for Outfalls 23A in the Lafarge permit.

Response:

Compliance with water quality standards for Total Coliforms is indicated by Fecal Coliforms limits. Additional limits for Total Coliforms are unnecessary, consistent with DEC's existing disinfection policy in TOGS 1.3.3. Parallel monitoring for total coliform would be redundant.

Comment # 9

Outfall 027 – Monitoring Requirement. The footnote for Outfall 027 on page 11 of the Lafarge permit states that monitoring for BOD₅, total residual chlorine, ammonia, and total phosphorous shall be required for 12 months starting from the effective date of the permit and the results will be submitted to NYSDEC. It is unclear whether monitoring of the parameters shall be continued for the remainder of the permit term after the initial 12-months of monitoring is complete.

Response:

This is a short term monitoring program specified for these parameters for 12 months from the EDPM.

Comment# 10

Special Monitoring.

Page 22 of the fact sheet for the Lafarge permit states that special monitoring for groundwater and landfill leachate is required by the permit, however, these requirements are not established in the permit. Additionally, the fact sheet states that the landfill leachate monitoring is required at Outfall 03B but permit does not identify an Outfall 03B. Please ensure that all necessary special monitoring requirements are clearly established in the permit and that all outfalls are properly referenced and identified.

Response:

Special monitoring for the quench water (ground water) and CKD leachate, and runoff were completed in July 2011. The revised fact sheet has been updated to delete these items.

Outfall 03B is a typographical error. It should be Outfall 23B. Outfall 23B has already been listed on page 2 of 27 of the draft SPDES permit.